ALUMINUM OXIDE MOISTURE SENSOR AND RELATED METHOD

Abstract

A method of operating an aluminum oxide moisture sensor to measure moisture in a sample gas, where the sensor comprises a pair of electrodes sandwiched about a dielectric, the method comprising: a) heating the sensor to a first temperature above the sample gas temperature and holding the sensor at said first temperature for a first predetermined period of time; b) cooling down the sensor to a second lower temperature over a second predetermined period of time; c) taking plural samples of sensor conductance over a third predetermined period of time at the lower temperature; and d) determining a rate of adsorption of the moisture and using the rate of adsorption as a measure of moisture in the sample gas.